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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,202	04/16/2004	Takahiro Souki	404J-000862	1165
27572	7590	03/06/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			MAI, ANH T	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	
			2832	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/826,202

Applicant(s)

SOUKI ET AL.

Examiner

Anh T. Mai

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) 9-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION*****Election/Restrictions***

Applicant's election without traverse of Species I in figures 1A-C, 2B, 3, in the reply filed on 1/17/2006 is acknowledged. Applicant indicates that claims 1-8, 17 and 18 read on the elected species. Further review indicates that claims 17-18 are not direct to the elected species but direct to non-elected species IV instead.

Therefore, in the instant application, claims 1-8 have been considered and examined; claims 9-16 and 17-20 have been withdrawn from further consideration.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Teranishi [JP 56071913A].

Teranishi discloses:

- a plurality of first ring layers each of which is formed so that a wire is wound by a given number of turns concentrically and inwardly [from 1 to 8 on one layer];
- a plurality of second ring layers each of which is formed so that the wire is wound by a number of turns concentrically and outwardly [from 9 to 16 on the next layer];
- the first ring layers and second ring layers are alternately aligned in a row [figure 3].

Art Unit: 2832

- Number of first ring layers is equal number of second ring layers [3 layers of each shown in figure 3];
- the first ring layer is formed of a first helical portion of inwardly helical shape;
- the second ring layer is formed of a second helical portion of outwardly helical shape.

With respect to claim 4, figure 3 shows the inner diameter of the wound coil member accords to a target diameter.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teranishi in view of Enomoto et al. [2003/0127933].

Teranishi discloses:

- a plurality of first ring layers each of which is formed so that a wire is wound by a given number of turns concentrically and inwardly [from 1 to 8 on one layer];
- a plurality of second ring layers each of which is formed so that the wire is wound by a number of turns concentrically and outwardly [from 9 to 16 on the next layer];
- the first ring layers and second ring layers are alternately aligned in a row [figure 3].

Art Unit: 2832

Teranishi discloses the invention as claimed except for the coil member is deformed so that the shape of inner coil member accords with a shape of iron core into which the coil member is attached. Enomoto discloses a coil piece 1 with through hole 1a having cross sectional shape to allow fitting onto the teeth 21 of iron core 2 as shown in figure 15a. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to form a shape of inner coil member as taught by Enomoto to the coil member as disclosed by Teranishi. The motivation would have been to providing fitting the coil to the core. Therefore, it would have been obvious to combine Enomoto with Teranishi.

Teranishi discloses the invention as claimed except for the coil member is formed by compressing and deformed so that the wire having polygonal cross sectional area. Enomoto discloses method of manufacturing coil pieces wherein wire 11 wound around bobbin 15 and pressure is applied to mold pieces 15b,c,d to provide coil 11 with polygonal cross section as shown in figure 9 [figures 7-9, paragraph 0047-0048]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to compress the coil as taught by Enomoto to the coil member as disclosed by Teranishi. The motivation would have been to provide more densely-compacted wires therefore packing density of such wires is higher [para 0052]. Therefore, it would have been obvious to combine Enomoto with Teranishi.

With respect to claims 5-8, the claims are rejected for reciting method/step derived from the structure as rejected above.

Art Unit: 2832

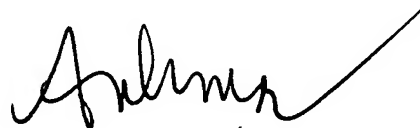
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995.

The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**ANH MAI  
PRIMARY EXAMINER**